VISIT…

NEST Complete Learning System™

The Animated Hero Classics®

Resource & Activity Book

Louis Pasteur

By: Kim Freeberg, Elke Hartlero-
ad,

NEST Family Entertainment™

Parent and Teacher Guide

Studies have proven learning is enhanced through the use of several senses. A recent study shows that we retain 10 percent of what we see, 20 percent of what we hear, and 50 percent of what we see and hear. But when we see, hear and do, we retain 90 percent of the information.
(Lisa Marie Nelson, Ph.D., Author "The Healthy Family Handbook").

The purpose of this Resource & Activity Book is to help children learn and retain the story theme and principles in a fun and educational way. Your children will love coloring pages, solving puzzles, matching games, completing word searches, and much more! Each Resource & Activity Book also features challenging questions and activities for children from preschool through middle school. And in the rare case you don't know an answer, there's an answer key in the back!

LEVEL OF DIFFICULTY

The activities in this book are designed in three levels of difficulty designated by symbols. The activities with one symbol are geared towards younger children while the activities with two and three symbols become increasingly challenging for older children.

Level One
Easy

Level Two
Intermediate

Level Three
Advanced

CURRICULUM RELATED

These educational activities are related to various educational discipline such as social studies (geography, history, culture), language arts (spelling, creative writing, grammar, literature), math (simple equations), and science. There are also activities for character development, video awareness, problem solving, music, and art. The subject codes below are for your convenience.

a	cd	c	g	h	la	m	mu	ps	sc	sp	va	w
Art	Character Development	Culture	Geography	History	Language Arts	Math	Music	Problem Solving	Science	Spelling	Video Awareness	Writing

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TABLE of CONTENTS

Parent and Teacher Guide 2

References 4

Activities & Color Pages:

Color 5

What Did He Do? 6

The A-maze-ing Mr. Pasteur 7

Code Fun! 8

Color 9

Word Shapes 10

What Am I? 11

Circle the Pictures 12

Color 13

Pasteur's Word Puzzle 14

Thanks for the Cure! 15

Help Pasteur to the Pasture 16

Color 17

Poet's Page 18

Fun with Math and Words 19

Find the Spelling Mistakes 20

Color 21

Louis' Sizzling Science Section 22

What Happened First? 23

Sentence Line-Up 24

Color 25

Triangle Puzzlers 26

Louis' Beautiful Butterflies 27

Complete the Sentences 28

Color 29

Puzzling Poetry 30

Word Search 31

Dot To Dot 32

Color 33

Mix 'N' Match Code 34

Matching Game 35

Pasteur's Scramblers 36

Color 37

Pasteur's Crossword Puzzle 38

Letter Shuffle 39

Get A Clue! 40

True or False 41

Questions 42

Fun Things to Think About & Do 43

Answer Keys 44-46

Certificate of Achievement 47

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REFERENCES

For those wishing to further study the life of Louis Pasteur, some of the references used in research for the Resource & Activity Book are listed below, along with other titles that may be of interest.

Ardley, Neil. *Simple Chemistry*. New York: Franklin Watts Ltd., 1984.

Birch, Beverly. *Louis Pasteur*. Milwaukee: Gareth Stevens, Inc., 1989.

Johnson, M. D., Spencer. *The Value of Believing in Yourself: The Story of Louis Pasteur*. La Jolla: Value Communications, Inc., 1976.

Keen, Martin L. *Let's Experiment*. New York: Grosset & Dunlap, 1968.

Malkus, Alida Sims. *The Story of Louis Pasteur*. New York: Grosset & Dunlap, 1952.

Mann, John. *Louis Pasteur, The Germ Killer*. New York: The Macmillan Company, 1966.

Pasteur, Vallery-Radot. *A Great Life in Brief: Louis Pasteur*. New York: Alfred A. Knopf, 1958.

Simon, Seymour. *Chemistry in the Kitchen*. New York: The Viking Press, 1971.

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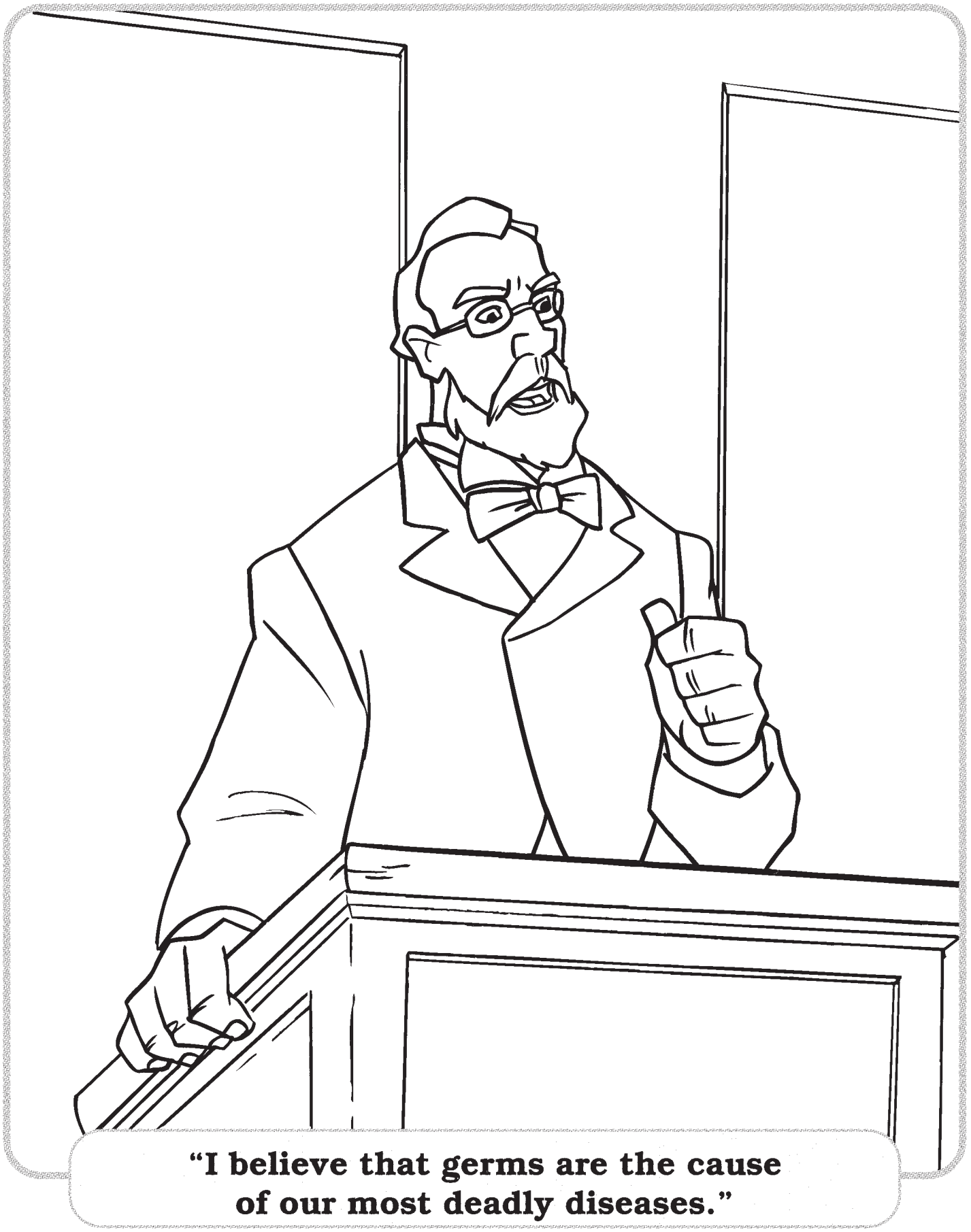

"I believe that germs are the cause of our most deadly diseases."

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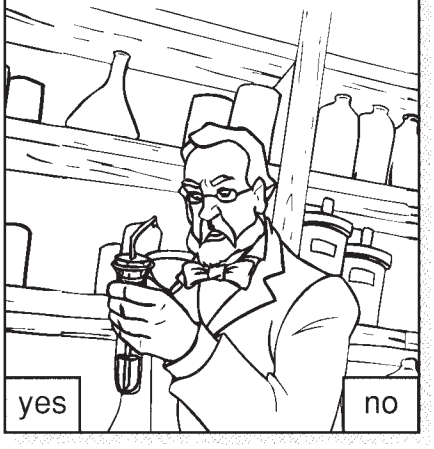
What Did He Do??

Look at the pictures. Read the sentence about Louis Pasteur. If it is true, circle yes. If it is not true, circle no.

Pasteur discovered a vaccine for rabies.

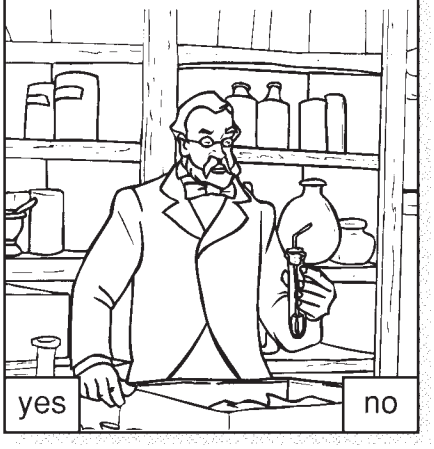


yes no

Pasteur was a great musician.

yes no

He helped the wine and vinegar industries.

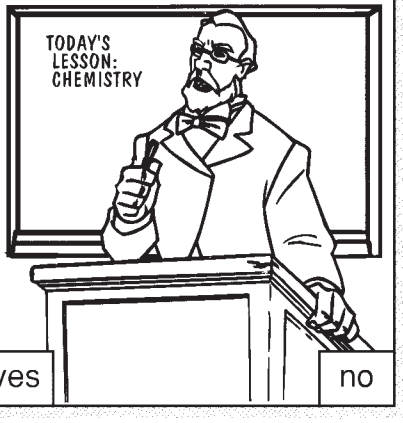


yes no

Pasteur found the cure for silkworm disease.

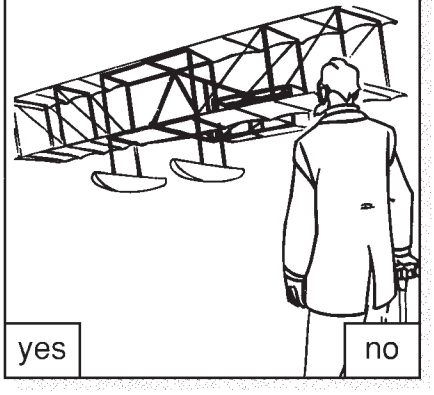
yes no

Pasteur was a teacher.



yes no

Pasteur invented the airplane.



yes no

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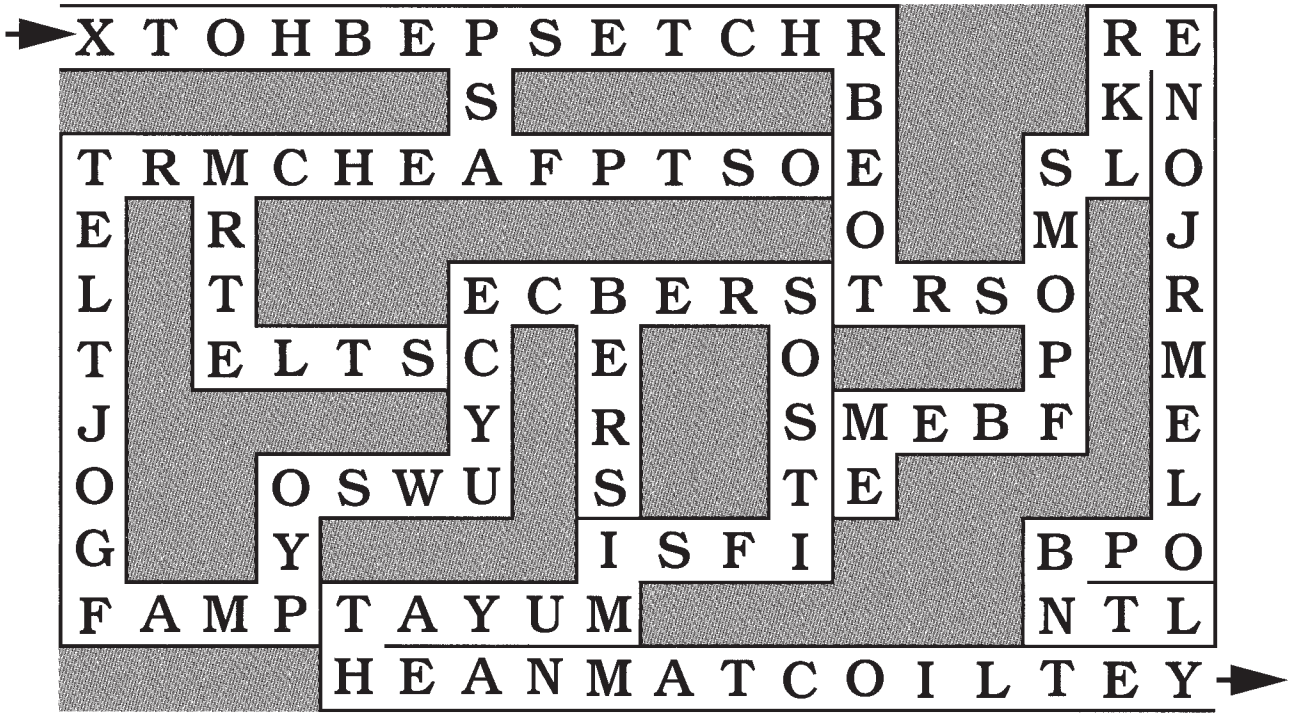
THE MISTER A-MAZE-ING PASTEUR

Mr. Pasteur was not a medical doctor, but he discovered the cure for many diseases. When doctors did not believe his discoveries and made fun of him, he was not bothered by them. He said there was a secret to his success.

To discover his secret, start at the arrow and work your way through the maze. When you have marked your path, go back to the arrow and cross off every other letter beginning with the "X." The remaining letters spell the secret to Pasteur's success. Write the words in order on the blanks below the maze.


X T O H B E P S E T C H R R E
S B K N
T R M C H E A F P T S O E S L O
E R O M J
L T E C B E R S T R S O R
T E L T S C E O P M
J Y R S M E B F E
O O S W U S T E L
G Y I S F I B P O
F A M P T A Y U M N T L
H E A N M A T C O I L T E Y

Louis Pasteur said, " _____

_____

_____."

What is the secret to his success?

____ ____ ____ ____ ____ ____ ____ ____ = holding fast to one's opinions.

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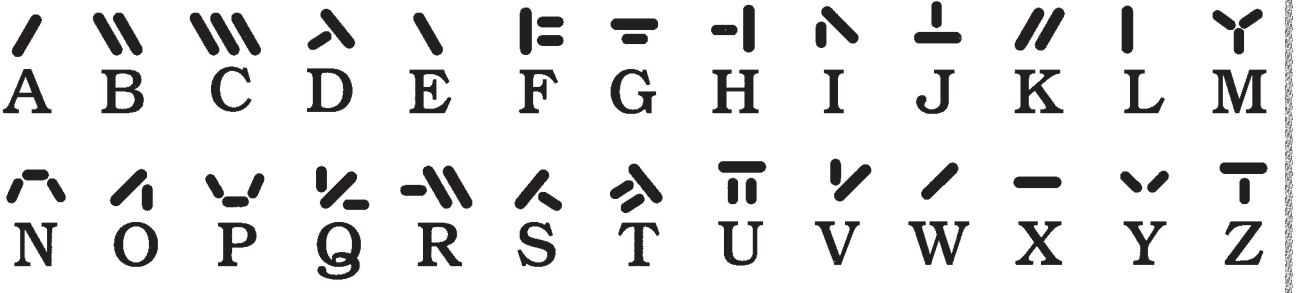
CODE FUN!

Pasteur found millions of tiny black rods under his microsope that caused disease. The rods looked something like the ones in the Code Box.

Use the Code Box to decode an amazing discovery that Louis Pasteur made.

CODE BOX



__ __ __ __ __ __ __ __

__ __ __ __ __ __ __ __ !

JUST FOR FUN!

Make up your own symbols for a secret code to send to your friends!

_____

_____

_____

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"We are the medical doctors, Mr. Pasteur. We don't believe some tiny invisible creature can kill a human being!"

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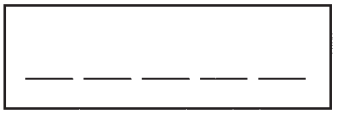
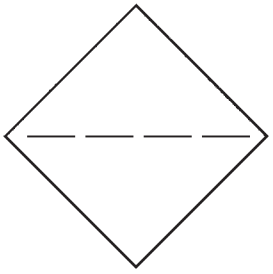
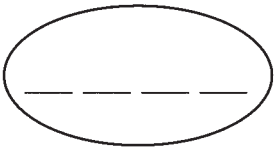
WORD SHAPES

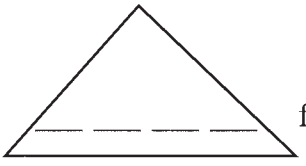
Each sentence below tells something about Louis Pasteur. There is a word missing in each sentence. Match the shape with a shape in the Word Shape Box. Write the word from the matching shape on the blanks inside the shape to complete the sentence.

1. Louis Pasteur was a  boy.

2. Louis liked to  at things very closely.

3. When he was older he looked at some .

4. He found out that germs can make you  .

5. Louis worked until he found a  for sickness.

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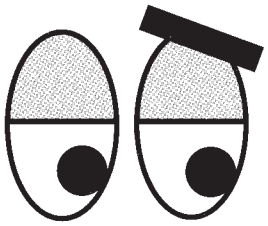

WHAT AM I??

Pasteur discovered a way to keep milk from spoiling. Fill in the blanks below and find the process which is named for him.

I'm a letter in **PAST**, but not in **LAST:**

I'm a letter in **PEAR**, but not in **PEER:**

I'm a letter in **SET**, but not in **MET:**

I'm a letter in **TELL**, but not in **BELL:**

I'm a letter in **LEG**, but not in **LOG:**

I'm a letter in **TRUCK**, but not in **TRICK:**

I'm a letter in **CAR**, but not in **CAT:**

I'm a letter in **MILE**, but not in **MOLE:**

I'm a letter in **QUIZ**, but not in **QUIT:**

I'm a letter in **LAME**, but not in **LIME:**

I'm a letter in **MAT**, but not in **MAP:**

I'm a letter in **SILL**, but not in **SELL:**

I'm a letter in **WON**, but not in **WIN:**

I'm a letter in **NEED**, but not in **FEED:**

Did You Know: Milk has to be heated to 140° F for 30 minutes to destroy the bacteria. Then it is cooled and quickly sealed in sterile containers.

This is called ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___.

Thank you, Mr. Pasteur, for making milk safe to drink!

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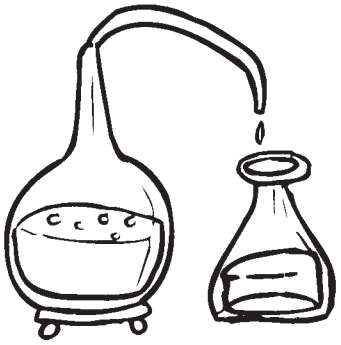
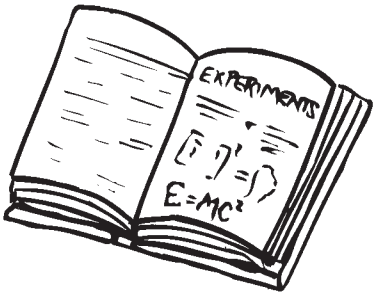
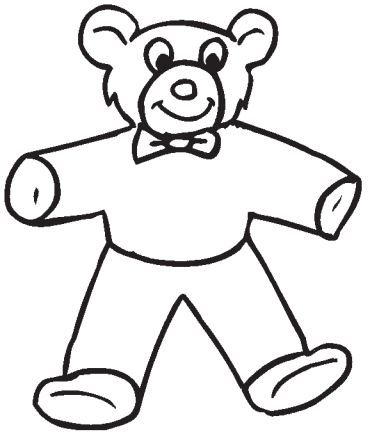
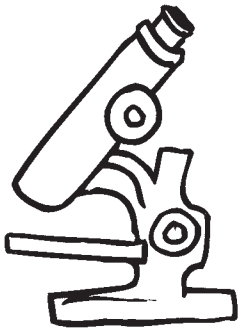
Circle the Pictures

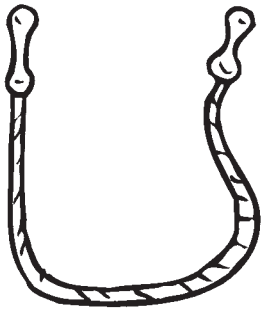
What are some things you might find in Mr. Pasteur's lab?
Circle the things that belong in a lab and color the pictures.

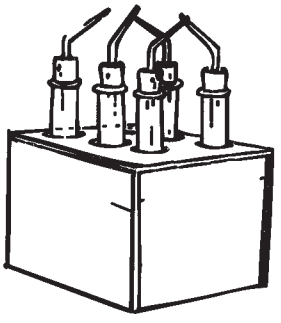












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Louis Pasteur and his assistant, Emile Roux, work on a cure for chicken cholera.

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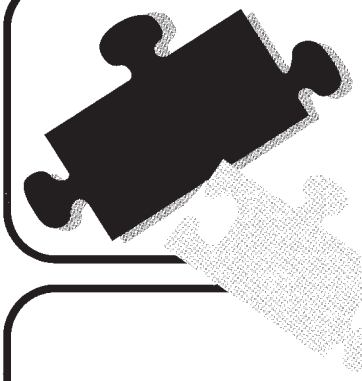

PASTEUR'S WORD PUZZLE

Thanks to Louis Pasteur, there is something we can all get to keep us from getting a disease. What is this?

The clues on the left will give you the word to write in the blanks on the right. Read the letters in the boxes as a down word.

	V
1. Meat from a calf	V _ □ _
2. Space with no air	V _ □ _ _ _
3. Occupation	V _ □ _ _ _ _ _
4. Prove to be true	V _ _ □ _ _
5. Blood vessel	V _ _ □
6. Large container for liquids	V □ _
7. Pasteur was so busy he never took this	V _ _ _ □ _ _ _
8. Small glass bottle	V □ _ _
9. Steam from boiling water	V _ _ □ _
10. Grapes grow on this	V _ □ _

What keeps us from getting diseaseS?

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

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h ps sc

THANKS for the Cure!

Pasteur found a cure for many diseases! Read the following paragraphs about the diseases Pasteur helped us prevent. Then find and circle all of the names of the diseases in the word puzzle below.

In the 1800's everyone dreaded getting a disease. Once a person was infected, there was almost no hope for recovery. But Louis Pasteur changed all of this by finding cures for a number of terrible diseases.

Anthrax is a disease of cattle and sheep that can be passed to humans. **Cholera** is a very serious illness caused by contaminated water. **Diphtheria** is another very serious disease in the bloodstream.

The **Plague** killed half of the people in Europe in the 1300's. It is spread by fleas from infected rats. **Pneumonia** is an infection of the lungs. **Rabies** is a disease of the nervous system caused by a virus. **Smallpox** is an easily spread disease caused by a virus. **Tuberculosis** attacks the lungs.

Typhoid fever comes from eating or drinking something contaminated with bacteria. Three of Pasteur's daughters died from this disease.

WORD SEARCH PUZZLE

D	N	T	A	D	I	O	H	P	Y	T	V
I	R	S	B	S	Z	V	L	J	I	X	A
P	N	E	U	M	O	N	I	A	Z	A	S
H	U	I	V	A	B	A	H	N	U	R	B
T	C	B	P	L	P	G	M	T	K	E	J
H	M	A	D	L	W	F	B	H	Y	L	X
E	N	R	T	P	A	N	E	R	E	O	T
R	E	F	O	O	Y	G	O	A	P	H	C
I	L	K	G	X	I	Q	U	X	D	C	W
A	H	J	S	C	D	G	R	E	F	H	I
S	I	S	O	L	U	C	R	E	B	U	T

Hint: Words read up, down, across, backwards & diagonally.

Getting a vaccination is better than getting a disease!

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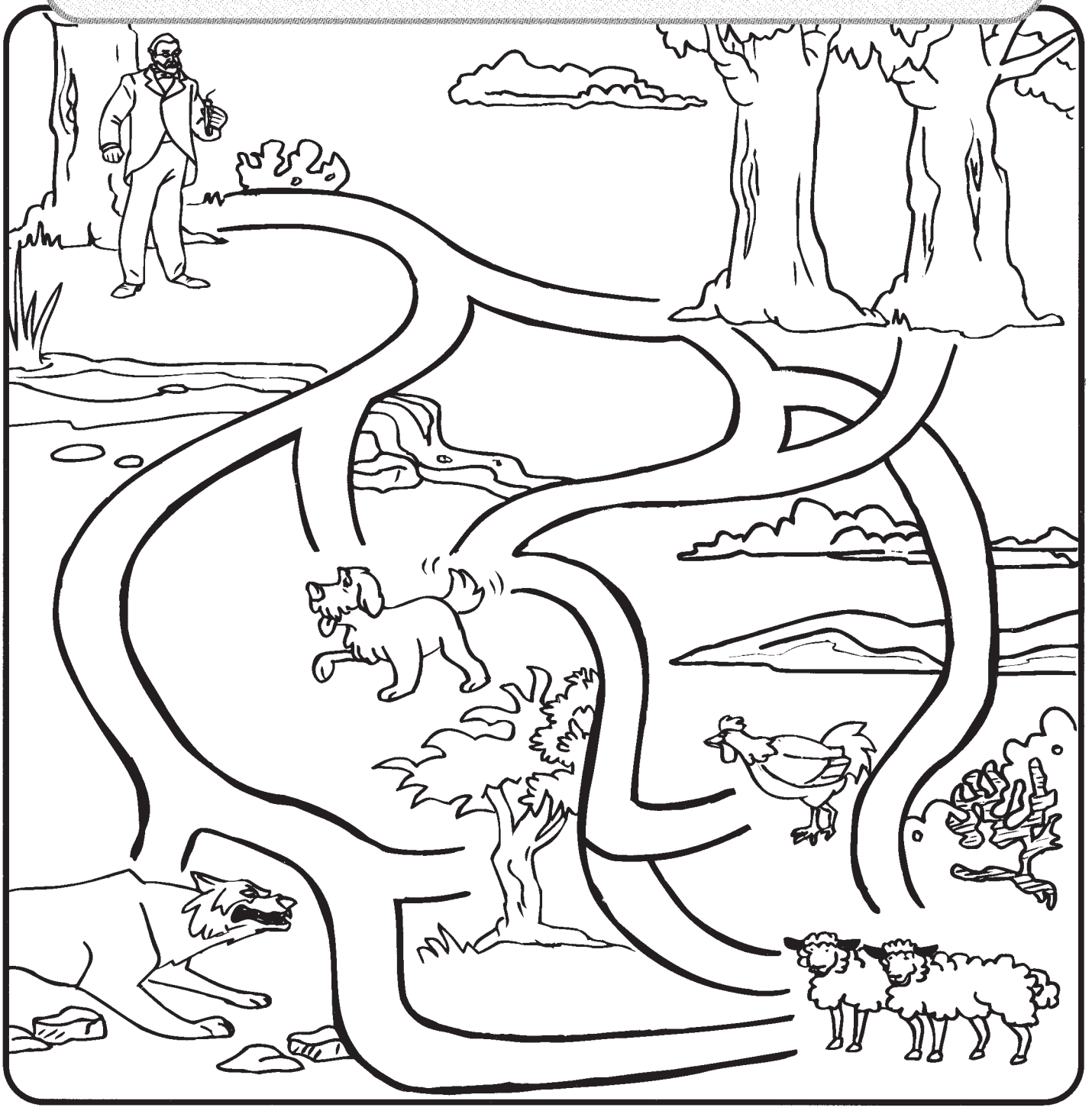
HELP PASTEUR TO THE PASTURE

Can you help Mr. Pasteur get to the sick sheep?
He has something that will make them well.



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"I think we've found the cure, Mr. Pasteur!"

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POET'S PAGE

YOU be the poet! Read the unfinished poem below about Louis Pasteur. Look at each underlined word. Think of the word that best rhymes with it to complete the idea of the sentence. Write the rhyming word on the blank to complete the poem.

THE TENACIOUS PASTEUR

Louis Pasteur from the days of his <u>youth</u>,
Was a hard working man of honesty and _____ .

Feeling deep sorrow for the <u>sick</u>,
He worked to find cures, though they didn't come _____ .

So deeply he cared, that his life's work he <u>gave</u>
To the study of diseases and the lives he could _____ .

He never would pass a needy one <u>by</u>,
For Pasteur always said, "I'll give it a _____ ."

Pasteur often had to work in a stuffy old <u>room</u>,
Hot in the summer, filled with darkness and _____ .

He had a constant helper for all of his <u>life</u>,
A true believer in his work, she was his loving _____ .

In his search for a cure, his workdays were <u>long</u>,
And always his enemies strived to prove he was _____ .

Pasteur tried to do his experiments <u>right</u>,
Often working through the _____ .

Louis Pasteur followed his intuition by <u>investigations</u>,
Where would we be if it weren't for his _____ ?

THIS POEM OFFICIALLY FINISHED BY POET: _____
(your name here)

For the meaning of tenacious, see page 7.

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fun with Math and Words

Find the amazing discovery that Louis Pasteur made when he was working on a cure for chicken cholera. Pasteur was looking for something strong enough to kill the cholera, but not so strong that it would kill the chicken. This discovery led to the development of vaccines that are used today for the prevention of disease.

To find this discovery, work all of the problems below. Your answers are code numbers to be used to break the code below. Use the letters below your answers to fill in the blanks.

8	3	9	6	1	2	9	4	7
+2	+1	+7	+8	+0	+1	+2	+3	+2
F	I	O	K	T	A	C	W	L

6	2	6	8	9	11	1	4	10
+6	+3	+2	+5	+9	+4	+1	+2	+7
E	P	R	D	S	U	M	B	N

Use a ___ ___ ___ ___ ___ ___ ___ ___ of the
7 12 3 14 10 16 8 2

___ ___ ___ ___ ___ ___ ___ to ___ ___ ___ ___ ___
13 4 18 12 3 18 12 6 15 4 9 13

___ ___ a ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
15 5 8 12 18 4 18 1 3 17 11 12

to the ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___.
8 12 3 9 13 4 18 12 3 18 12

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A+

Find The Spelling Mistakes...

Find and circle the ten spelling mistakes in the story below about Louis Pasteur. Write each word correctly on the spaces at the bottom of the page.

Louis Pasture was a chemist. Many docters made fun of Pasteur's reserch because he was not a medical doctor. They thought Pasteur could not find a cure for desease.
One day they asked Pasteur to pruve that his vacine could prevent sheep from getting anthrax (a deadly sheep and cattle disease). He gave vaccinations to 25 sheep and 25 sheep recieved none. Then he gave all 50 sheep a fatal dose of the anthrax jerms. The 25 sheep that had been vaccinated lived, but the other 25 died! This proved to the wurld that Pasteur had discovered a way to pervent disease.

1 _____

2 _____

3 _____ 4 _____ 5 _____ 6 _____

7 _____ 8 _____ 9 _____ 10 _____

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Marie Pasteur helps her husband after he has a stroke.

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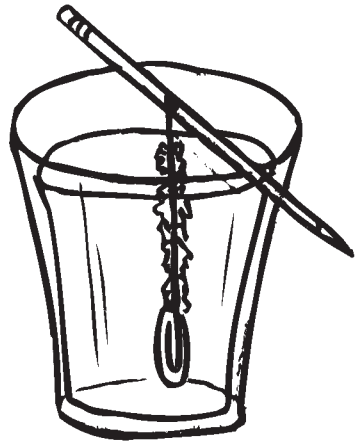
LOUIS' SIZZLING SCIENCE SECTION

Louis was a chemistry teacher and studied crystals for many years. Crystals form into many different shapes and sizes, depending on the ingredients used.

Have fun making some of Louis' crystals!

Sugar Crystals (Rock Candy)



Bring **1 cup** of **water** to boil (have an adult help you) and add **2 cups** of **sugar**. Stir until the sugar dissolves. Let the mixture cool and then pour it into a **drinking glass**. Tie a **paper clip** to one end of a piece of **clean cotton string**. Tie a **pencil** to the other end of the string. Lay the pencil across the top of the glass with the string in the water.

In a few hours sugar crystals will form on the string. Leave for 2 or 3 days and then enjoy your delicious, sugar crystal treat!

Crystal Garden

Place several small pieces of **brick** (or coal or any porous material) into a **shallow glass bowl** and set aside.

In another bowl, mix **4 tablespoons** EACH of **salt** (non-iodized), **water**, **liquid bluing** and **clear**, **household ammonia**. Stir until the salt dissolves. Pour the mixture slowly over the bricks in the shallow glass bowl. Add a few drops of **food coloring** to give it color.

Crystals will start to grow in a few hours and will continue growing for several days.

Enjoy your garden that doesn't need to be weeded!

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WHAT HAPPENED FIRST?

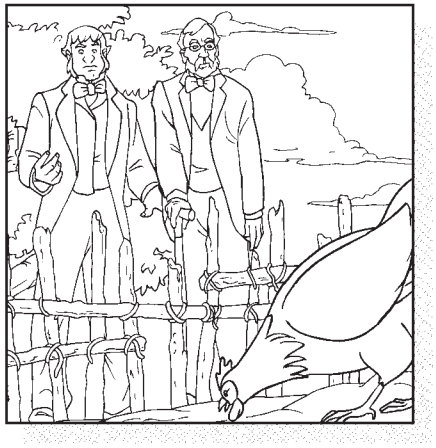
Number each picture below in the order that it happened in the story of Louis Pasteur.

Emile is excited about the cure.

_____

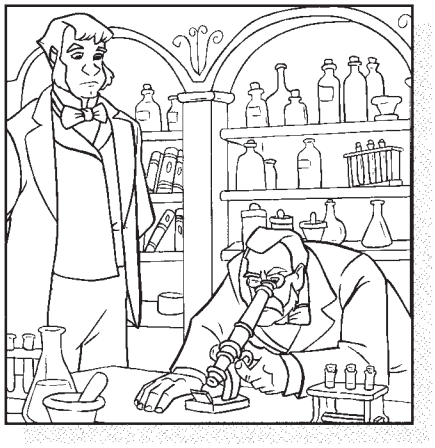
The doctors say there is nothing they can do.

_____



Pasteur helped the farmers and their chickens.

_____



Pasteur looks for a cure.

_____

A farmer brings a sick chicken to the doctors.

_____

The Minister of Agriculture knows Pasteur will try to help.

_____

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SENTENCE LINE-UP!

Can you put the six sentences below in the right order so that they will form a paragraph that makes sense? When you know the right order, write the complete paragraph in the blank spaces.

1. Pasteur agreed to look into the problem.
2. He studied for several months and discovered the disease that was killing the silkworms.
3. One day a man came to see Louis Pasteur and asked if he would study the epidemic that was killing the silkworms in the south of France.
4. Pasteur cured the disease and saved the French silk industry.
5. So he took some of his best students and his family to Alais, his own village in the south of France.
6. There the students and the Pasteurs settled down in a cottage to solve the mystery of the silkworms.

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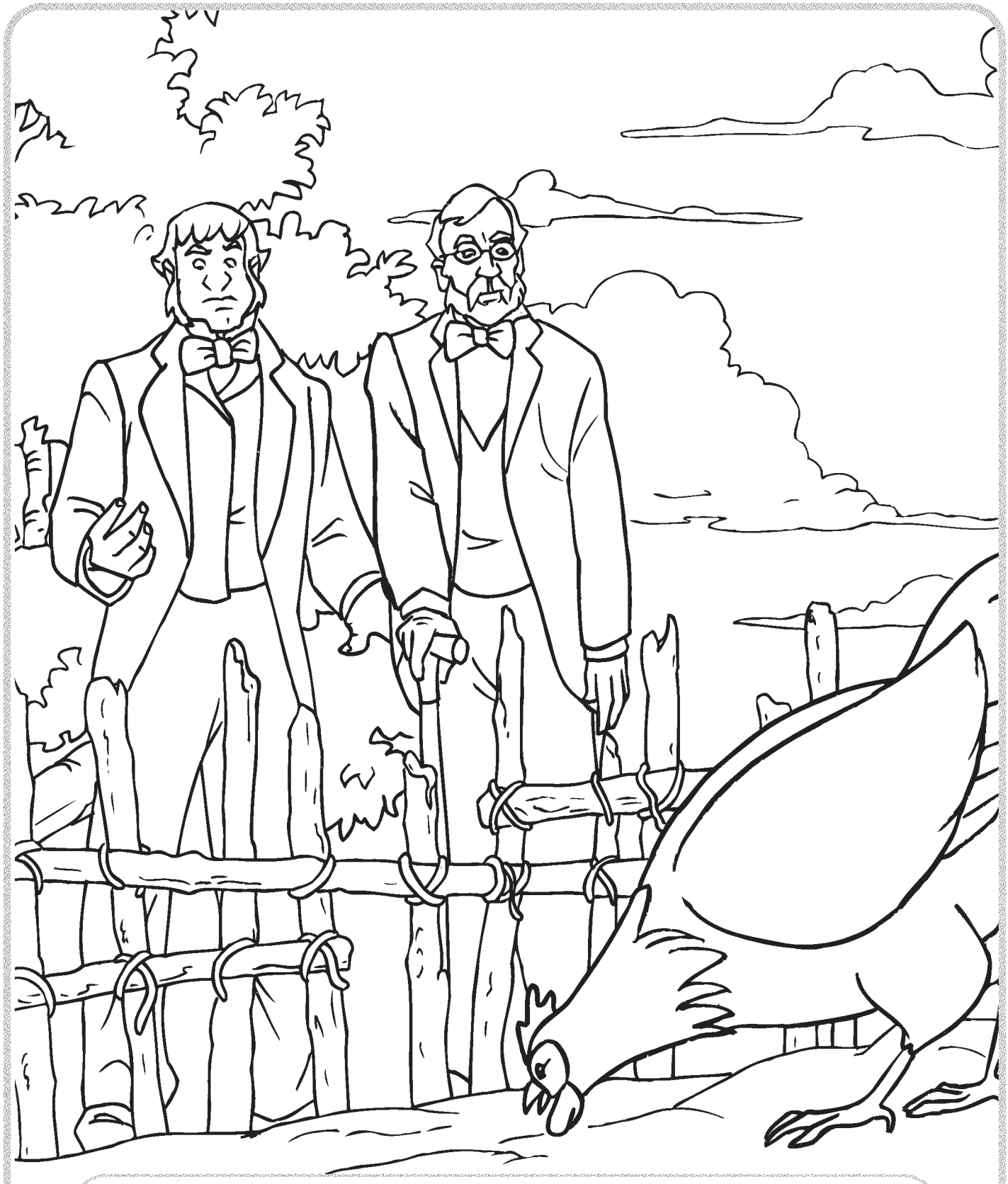

Mr. Pasteur's vaccine saves the lives of thousands of chickens.

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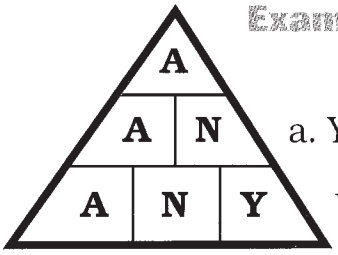
Triangle Puzzlers

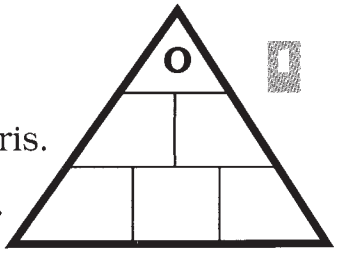
Using the letter at the top of each triangle, add a letter to make a two-letter word. Add another letter at the beginning or the end to make a three-letter word. Fill in the blanks in each sentence to help you find the words.

Example:



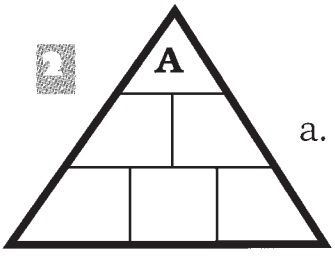
a. Young Louis Pasteur wanted to be **AN** artist.

b. He did not have **ANY** interest in science.



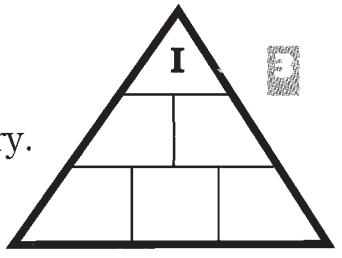
a. Louis went _____ a coach to study in Paris.

b. He was homesick, so he went home _____ day.



a. _____ soon as he was older, Louis went back to Paris.

b. He _____ ready now for school.



a. Louis became interested _____ chemistry.

b. His careful study helped him to _____ the battle against disease.

JUST FOR FUN!

Now you can make up your own triangle puzzlers! Remember to add only one letter at a time to make new words.

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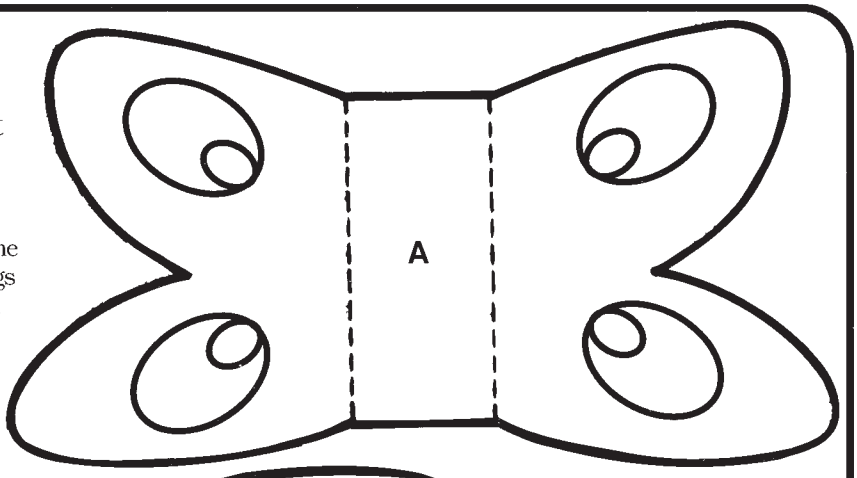
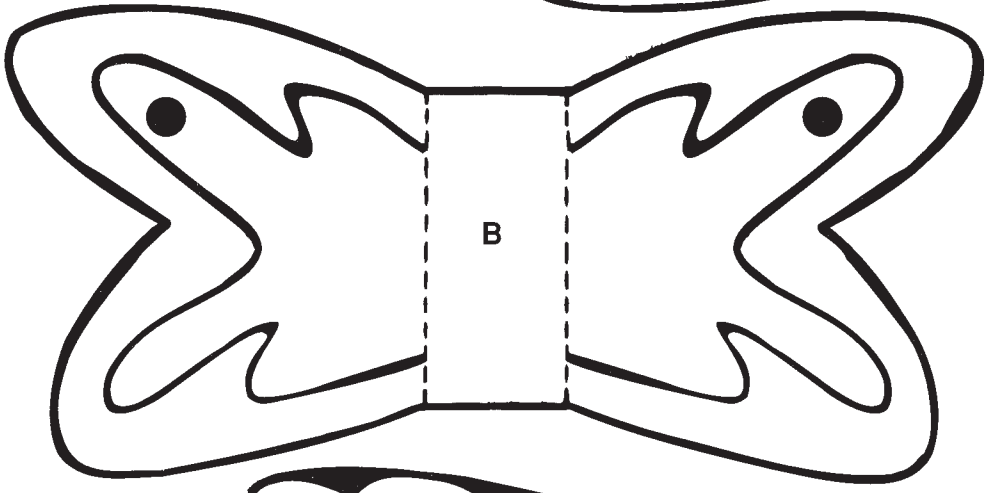
LOUIS' BEAUTIFUL BUTTERFLIES

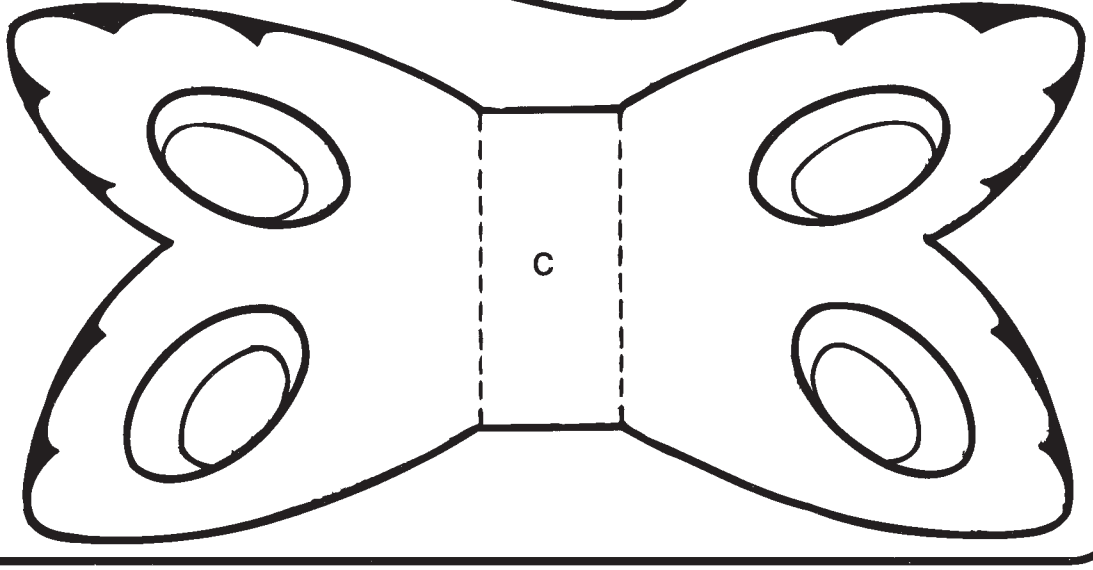
Silkworms are caterpillars that turn into moths. Louis found a cure for the disease that was killing them.

INSTRUCTIONS:

Photocopy this page or lay a thin paper over the butterfly parts and trace. Color the butterfly wings and body. Then cut them out. Fold on the dotted line. Put paste on part C. Press part B to part C with the colored sides up. Put paste on part B. Press part A to part B. Put paste on part A. Place the body on part A.







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COMPLETE THE SENTENCES.

Louis Pasteur was continually looking for ways to help people. Learn more about Pasteur helping people in the sentences below.

Complete the sentences by choosing the correct word from the Word Box.

1. A scientist searches for the _____.
2. "I would feel that I had been stealing if I were to spend a single day without _____," Pasteur said.
3. Pasteur was called "the scientist who performed _____."
4. After Pasteur had been successful in treating dogs with rabies, he wanted to treat human beings and was ready to start with _____.
5. He planned to _____ himself with rabies, then give himself the treatment.
6. Before he could perform the test on himself, a boy who had been bitten badly by a _____ dog, was brought to him for treatment.
7. Pasteur had to make a hard _____.
8. The boy _____ to perfect health.
9. Out of 350 people who came to Pasteur for anti-rabies vaccinations, only _____ died.
10. The reason the vaccine did not help this person was that she had been bitten _____ days before they could bring her for treatment.

WORD BOX

recovered	truth	thirty-seven	rabid	working
inoculate	decision	miracles	one	himself

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Anthrax is killing many sheep.

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PUZZLING POETRY

Each rhyme describes something from the story of Louis Pasteur. Read each rhyme aloud. Then write your answer in the blank.

I house the means of future dreams
of helping the sick to recovery,
With all of my dials and experimental vials
the outcome may be great discovery.

WHAT AM I? _____

I make people sick, and I can be quick,
For years complete rule was my lot.
But Pasteur never once slowed,
'til his experiments showed
He could end my effect with a shot.

WHAT AM I? _____

Louis Pasteur's aim was to ruin my reign
with all of his experiments and trials,
My secrets, I thought, would never be brought
to discovery in labs in his vials.

WHAT AM I? _____

Pasteur studied me to make people free
from the fear of a dreaded disease.
Hydrophobia is its name, its result's always the same
The poor victim I bit would decease.

WHAT AM I? _____

I am taught in most schools, and always my rules
help students discover great things.
It takes dedication and sometimes creation
to appreciate my effect and examinings.

WHAT AM I? _____

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WORD SEARCH

Find the hidden words listed in the Word Box and circle them in the puzzle below. Hint: the words read up, down, across, backwards and diagonally.

WORD BOX

BIOLOGY
CHEMICALS
CHEMISTRY
CHICKENS
CHOLERA
DISEASE
EMILE ROUX
EXPERIMENTS
FRANCE
GERMS
JOSEPH MEISTER
LABORATORY
LOUIS PASTEUR
MARIE PASTEUR
MICROSCOPE
RABIES
RESEARCH
SCIENTIST
SHEEP
VACCINE

L O U I S P A S T E U R A C E D B E
A E F N G U H P I Q J R K S L T M X
B U M I C R O S C O P E V X Z Y W P
O A H I B I C J E D K E L F M G N E
R A R E L O H C O N H C R A E S E R
A P W Q X E R Y S Z I T A U B R V I
T C J G D K R E L F M C G N H E I M
O O Q E P B I O L O G Y C R S T V E
R U W R X Q C A U B V L S A R S S N
Y N T M G J L H K X M O P N V I N T
D H E S I F C H E M I C A L S E E S
S F Q X I R Y S Z M T A U B V M K W
E C R U E T S A P E I R A M D H C E
I F M A G N N H O I P S J Q K P I L
B R Y S N Z T E A U B V T W C E H X
A D J E K C C H I C F L G R H S C I
R M U N V O E P W C Q X R Y Y O S T
T E S A E S I D Z A S H E E P J B C

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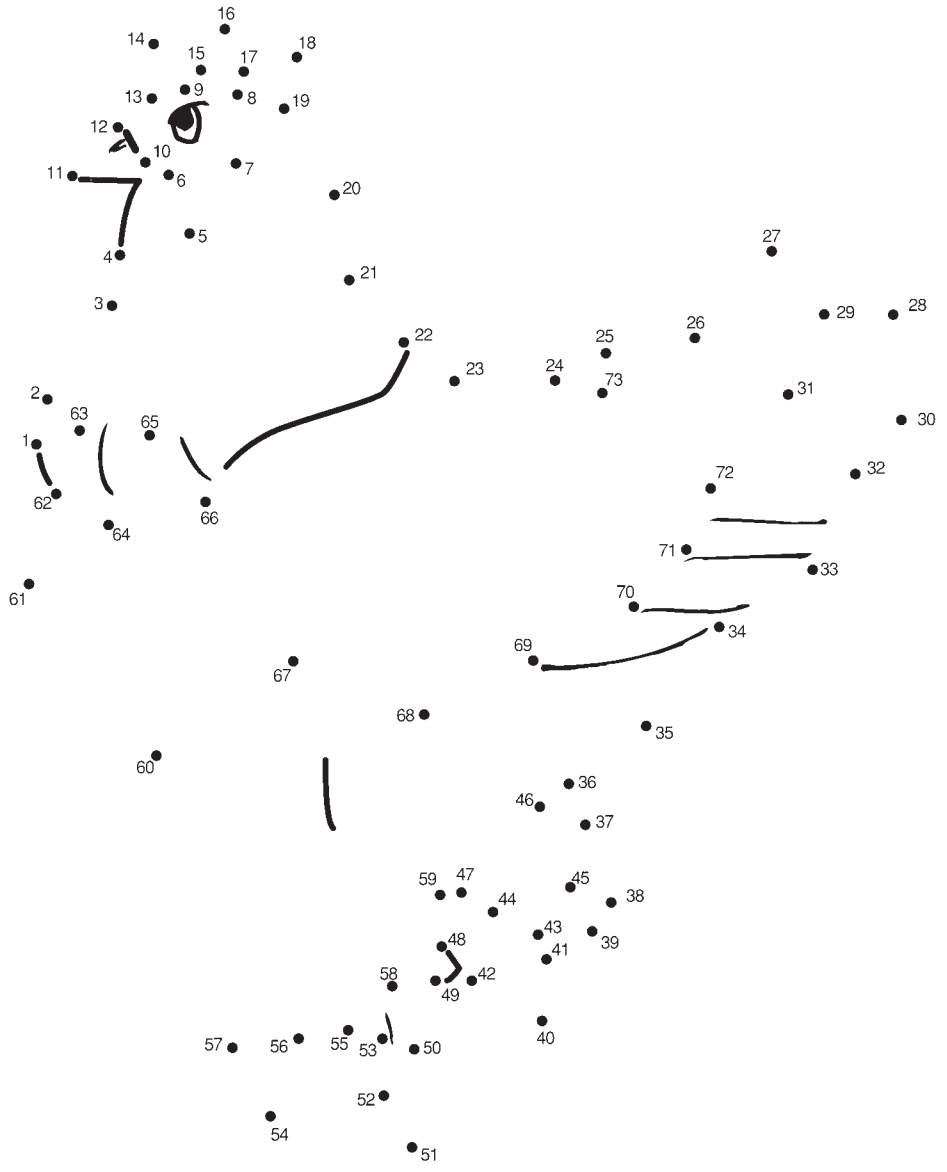
DOT-TO-DOT

I was very sick. Many of my friends died. Mr. Pasteur helped me to get well. Draw a line from dot to dot following the numbers in order to find out what I am.



What am I? _____ _____ _____ _____ _____ _____ _____

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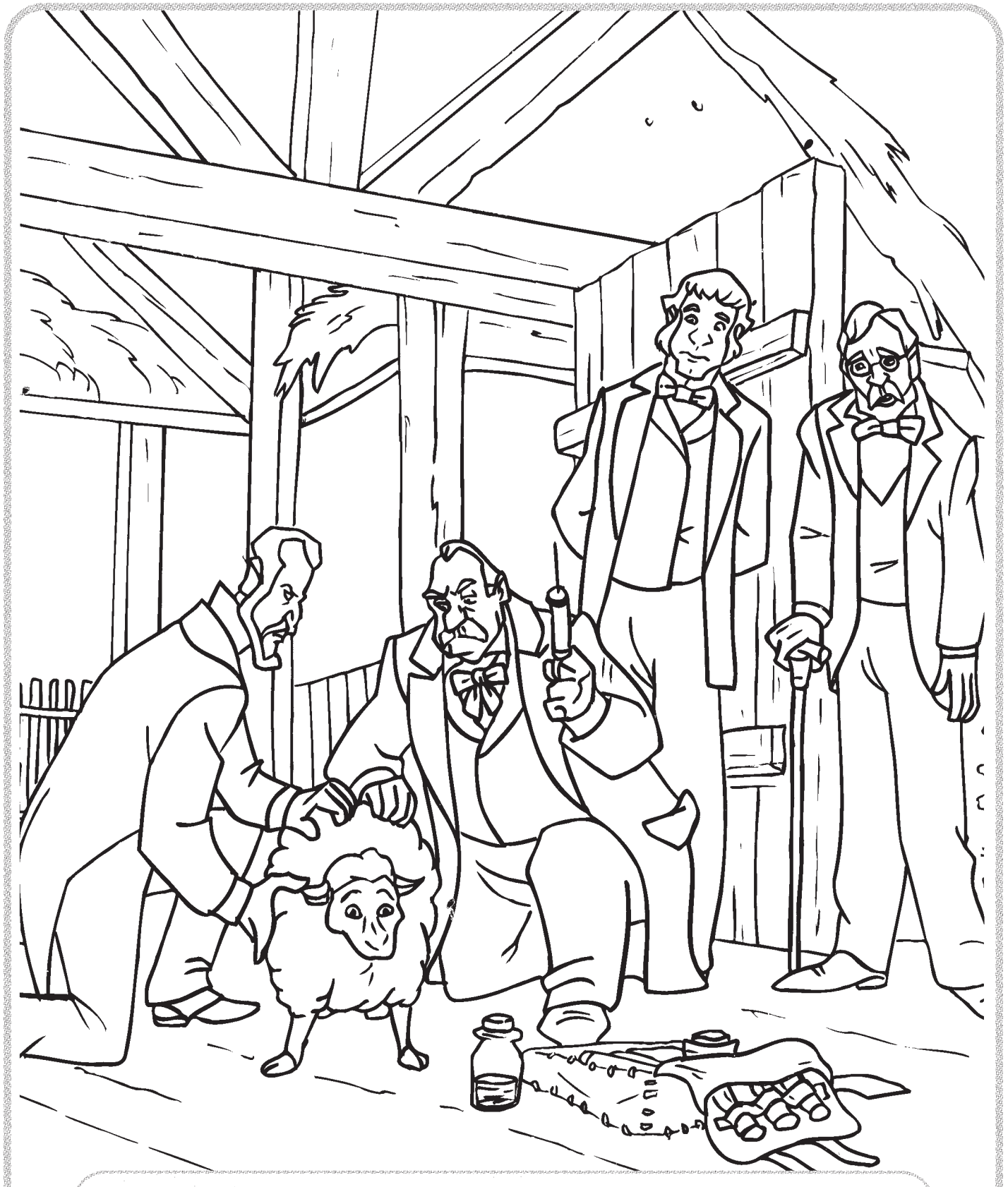

Louis Pasteur proves that he can prevent sheep from getting anthrax.

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MIX 'N' MATCH CODE

Louis Pasteur has been said to have "unlocked the secrets of disease." Work the puzzle below to learn more about his discoveries.

To find the answer for each question, match the number under the blank with the number in the Code Box. Write the matching letter in the blank.

CODE BOX

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

1. For years, scientists had believed that people were born with a disease in their body waiting to happen. What was this theory called?

19	16	15	14	20	1	14	5	15	21	19		7	5	14	5	18	1	20	9	15	14

2. What did Louis Pasteur prove that showed this theory to be wrong?

20	8	1	20		4	9	19	5	1	19	5		9	19		3	1	21	19	5	4				
2	25		1	14		9	14	22	1	19	9	15	14		15	6		20	8	5					
2	15	4	25		2	25		7	5	18	13	19	.												

3. What did this great discovery do?

9	20		12	5	4		20	15		20	8	5													
16	18	5	22	5	14	20	9	15	14		15	6		4	9	19	5	1	19	5	.				

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MATCHING GAME

All of the words below are associated with Louis Pasteur. Match the words on the left to one that explains or means the same on the right. Connect the words with a line.

Born in	Artist
First became an	Fermentation
Scientist	France
Professor	Experimenting
Wine or vinegar	Dogs
Enemies	Heating process
Silkworm	Germ free
Examine	Innoculation
Pasteurization	Jealousy
Sterilization	Microscope
Rabies	Chrysalis
Vaccine	College

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PASTEUR'S SCRAMBLERS

Who or what am I? Unscramble each word on the right to answer the questions on the left. Your answers will be names of people or things that are important to the story of Louis Pasteur.

1 I am the first boy ever cured of rabies. Who am I? OPHESJ _____ EIMTSER _____

2 I am Pasteur's faithful assistant. Who am I? LEIME _____ XUOR _____

3 I am a deadly disease that kills sheep and cows. What am I? THNAAXR _____

4 I am very small and I produce some of the world's finest fabric. What am I? LKWOSIRM _____

5 I am a disease that kills dogs and people. What am I? BERIAS _____

6 I am something that rides on dust in the air. What am I ? RSMEG _____

7 I am the place where Louis Pasteur does his experiments. What am I ? ORORBALALTY _____

8 I am a terrible disease that killed three of Pasteur's daughters. What am I ? OITPHYD _____ VEERF _____

9 I can prevent disease or cure it. What am I ? CCVINAE _____

10 Louis Pasteur would never have made all of his discoveries without me. What am I ? RIMCOPESCO _____

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Marie Pasteur begs her husband to give Joseph the rabies vaccine.

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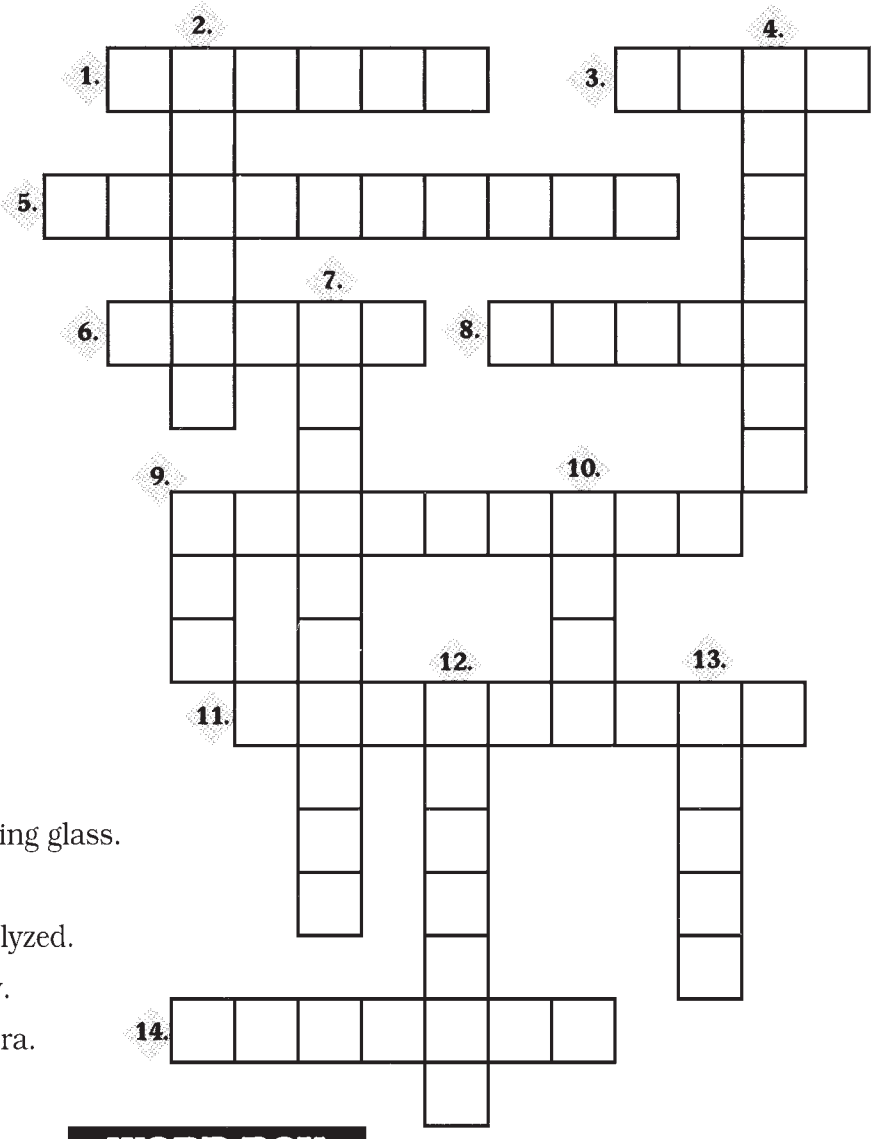
Pasteur's Crossword

Across

1. Pasteur's birthplace.
3. Needed for pasteurization.
5. Scientists' place of work.
6. Microbes producing disease.
8. Symptom of disease.
9. Hardshelled pupa of a moth or butterfly
11. One who studies physical or natural science.
14. The knowledge gained by systematic study.

Down

2. Disease of dogs
4. Disease of cows and sheep.
7. An instrument with magnifying glass.
9. Animal that has anthrax.
10. Pasteur's arm that was paralyzed.
12. To inspect or study carefully.
13. Animals that can have cholera.



WORD BOX

ANTHRAX	FRANCE	MICROSCOPE	GERMS	COW
FEVER	CHRYSALIS	SCIENCE	LABORATORY	HEAT
LEFT	EXAMINE	SWINE	SCIENTIST	RABIES

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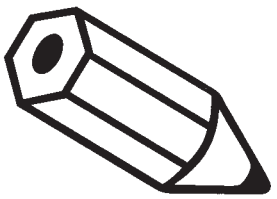

Letter SHUFFLE!

See how many words YOU can make out of the letters in the name:

LOUIS PASTEUR

NOTE: You cannot use any letter more times that it appears in the name.
(For example: no more than one L, two S's, etc.)

3 Letter Words - 1 point each	4 Letter Words - 2 points each
___ words x 1 = ___ points	___ words x 2 = ___ points
5 Letter Words - 3 points each	**6 Letter Words - 4 points each**
___ words x 3 = ___ points	___ words x 4 = ___ points

TOTAL POINTS_____

5-15 = Junior • 16-30 = Intermediate • 31-45 = Advanced • 46-60 = Ace
61-85 = Champ • 86-100 = Super Champ • 101 and up = Out of Sight!

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Get a Clue!

Louis Pasteur had a character quality that helped him to succeed in his experiments. Work the puzzle below and discover the quality he had.

Step One: Read the sentence clues. Write the correct letter from the Clue Box on the spaces after each clue.

1. The name of the first boy cured of rabies
2. The name of Pasteur's assistant
3. Pasteur put this into bottles
4. A disease spread by mad dogs
5. The name of Pasteur's wife
6. This is injected to prevent disease
7. Pasteur believed disease came from this
8. The Pasteur Institute is in this city
9. A deadly disease in sheep
10. A farmer wanted a cure for these animals
11. The animals had this disease
12. Pasteur's occupation

Clue Box:

	1	2	3	4	5
A	A	E	B	T	P
B	K	I	R	S	M
C	J	L	N	O	V
D	G	H	X	C	U

1. ___ ___ ___ ___ (A5) ___ — C1 C4 B4 A2 A5 D2
2. ___ ___ ___ ___ (A2) — A2 B5 B2 C2 A2
3. ___ ___ (B3) — A1 B2 B3
4. ___ ___ ___ ___ ___ (B4) — B3 A1 A3 B2 A2 B4
5. ___ ___ ___ ___ (A2) — B5 A1 B3 B2 A2
6. (C5) ___ ___ ___ ___ ___ ___ — C5 A1 D4 D4 B2 C3 A2
7. ___ (A2) ___ ___ ___ — D1 A2 B3 B5 B4
8. ___ ___ (B3) ___ ___ — A5 A1 B3 B2 B4
9. (A1) ___ ___ ___ ___ ___ ___ — A1 C3 A4 D2 B3 A1 D3
10. ___ ___ ___ ___ ___ ___ (C3) ___ — D4 D2 B2 D4 B1 A2 C3 B4
11. (D4) ___ ___ ___ ___ ___ ___ — D4 D2 C4 C2 A2 B3 A1
12. ___ ___ (A2) ___ ___ ___ ___ — D4 D2 A2 B5 B2 B4 A4

Step Two: Write the circled letters in order on the blanks below to complete the sentence.

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ **is sticking with a job and not giving up.**

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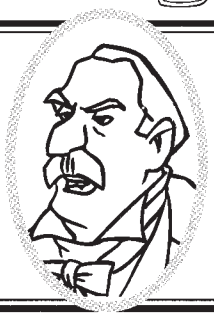
TRUE OR FALSE



Read each statement below. If it is true, circle the "T." If it is false, circle the "F."

1. **Louis Pasteur was born in France.** T F
2. **Pasteur first wanted to be an artist.** T F
3. **A scientist is a person who entertains.** T F
4. **Pasteur had a passion for discovering the truth.** T F
5. **Pasteur had many opponents to his theories.** T F
6. **Pasteur believed that diseases come from germs outside our bodies.** T F
7. **His opponents declared that we are born with diseases within our bodies.** T F
8. **Pasteur ran for the Senate, hoping to help the progress of science.** T F
9. **He was elected by a large vote.** T F
10. **Pasteur discovered the cure for rabies.** T F
11. **Pasteur suffered a stroke, but recovered completely.** T F
12. **Pasteur discovered that for milk to be safe to drink, it must be homogenized.** T F

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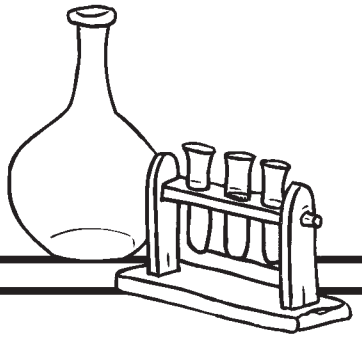
Scientist Louis Pasteur
QUESTIONS



1. What country was Louis Pasteur born in? _____
2. What was Louis Pasteur's occupation? _____
3. Who was Pasteur's loyal and faithful assistant? _____
4. What were Louis Pasteur and Emile doing on the mountain, in the meadow, and in the dirty city streets? _____
5. What happened to the water in the bottles? _____
6. What new theory did Pasteur present to the Academy of Medicine? _____
7. How did all the medical doctors react to Pasteur's theory? _____
8. What disease was killing the chickens in France? _____
9. Who did the Minister of Agriculture first call on to find the cure? _____
10. Who did the Minister of Agriculture know that would try to find a cure? _____
11. What happened to Louis Pasteur that stopped his work for awhile? _____
12. What disease killed three of Pasteur's daughters? _____
13. What did Pasteur inject into the chickens that cured their disease? _____
14. A deadly disease called anthrax attacks which animals? _____
15. How did Pasteur prove that his vaccine would prevent anthrax? _____
16. What happens when a person is bitten by a dog or other animal that has rabies? _____
17. Why was Louis Pasteur afraid to use the rabies vaccine on Joseph? _____
18. What happened to Joseph? _____
19. Why was this important? _____
20. Did the medical profession ever accept Pasteur's theories? _____

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FUN THINGS TO THINK ABOUT & DO

NOTE TO THE TEACHER: These are activities for a group to do or discuss and think about.

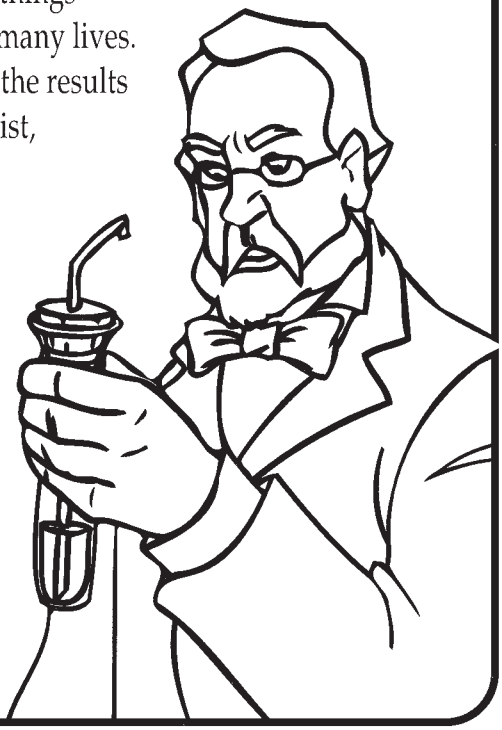
1. Louis Pasteur experimented with seeds. A seed is a tiny plant surrounded by food and thick outer skin. When placed in damp soil, a small plant begins to grow.

Put a few beans in a glass with moist blotting paper. In two days take out a bean and open it. Do you see a tiny plant growing?

If you do not see anything growing, wait another day then open another seed. Be sure to keep the paper moist.

2. Louis Pasteur was a chemist and not a medical doctor. Almost every discovery he made was laughed at by the medical profession. How do you think he felt? What made him keep on with his experiments and not quit because of discouragement?

3. Pasteur was a very curious boy and he wanted to know why things happened. As he grew older that curiousity enabled him to save many lives. He would try some experiments hundreds of times to make sure the results were accurate. Discuss the qualities that are needed to be a scientist, chemist or anyone who works to turn theories into facts.



4. The microscope changed medical theories that had been believed for hundreds of years. Louis Pasteur was bent over a microscope most of his life studying the miniature world.

If you don't have a microscope, borrow one or use one at school. Place various materials on the slide such as a strand of hair, an onion skin, a drop of water, etc. Notice the difference in the make-up of each article.

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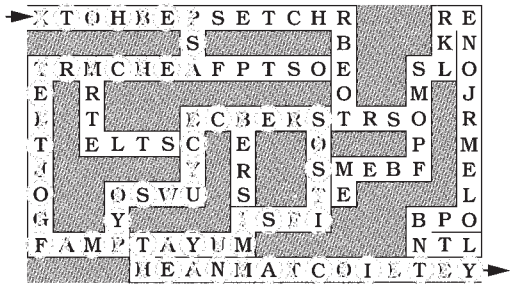
ANSWER KEY

WHAT DID HE DO? — PAGE 6

Pasteur discovered a vaccine for rabies.
Pasteur was a great musician.
He helped the wine and vinegar industries.
Pasteur found the cure for silkworm disease.
Pasteur was a teacher.
TODAY'S LESSON: CHEMISTRY
Pasteur invented the airplane.
yes
no

THE A-MAZE-ING MR. PASTEUR — PAGE 7



Louis Pasteur said, ***"The secret of my success is my tenacity."***

T E N A C I T Y *= holding fast to one's opinions.*

CODE FUN! — PAGE 8

ANSWER: Germs are in the air!

WORD SHAPES — PAGE 10

1. *Louis Pasteur was a* ***quiet*** *boy.*
2. *Louis liked to* ***look*** *at things very closely.*
3. *When he was older he looked at some* ***germs****.*
4. *He found out that germs can make you* ***sick****.*
5. *Louis worked until he found a* ***cure*** *for sickness.*

WHAT AM I? — PAGE 11

Answer: PASTEURIZATION

CIRCLE THE PICTURES — PAGE 12

PASTEUR'S WORD PUZZLE — PAGE 14

1. *ve**a**l*
2. *va**c**uum*
3. *vo**c**ation*
4. *ver**i**fy*
5. *vei**n***
6. *v**a**t*
7. *vaca**t**ion*
8. *v**i**al*
9. *vap**o**r*
10. *vi**n**e*

Vaccination

THANKS FOR THE CURE! — PAGE 15

D	N	T	A	D	I	O	H	P	Y	T	V
I	R	S	B	S	Z	V	L	J	I	X	A
P	N	E	U	M	O	N	I	A	Z	A	S
H	U	I	V	A	B	A	H	N	U	R	B
T	C	B	P	L	P	G	M	T	K	E	J
H	M	A	D	L	W	F	B	H	Y	L	X
E	N	R	T	P	A	N	E	R	E	O	T
R	E	F	O	O	Y	G	O	A	P	H	C
I	L	K	G	X	I	Q	U	X	D	C	W
A	H	J	S	C	D	G	R	E	F	H	I
S	I	S	O	L	U	C	R	E	B	U	T

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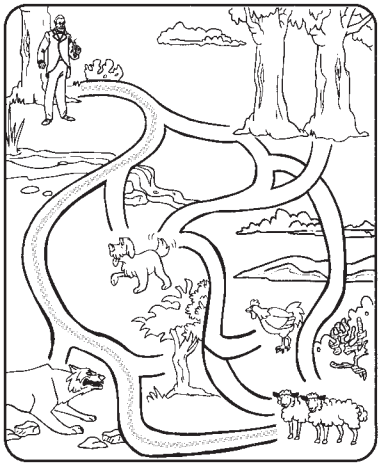
HELP PASTEUR TO THE PASTURE — PAGE 16



POET'S PAGE — PAGE 18

*Answers: youth, **truth**; sick, **quick**; gave, **save**; by, **try**; room, **gloom**; life, **wife**; long, **wrong**; right, **night**; investigations, **vaccinations***

FUN WITH MATH AND WORDS — PAGE 19

*Answer: Use a **weak form** of the **disease** to **build up** a **resistance** to the **real** **disease**.*

FIND THE SPELLING MISTAKES — PAGE 20

1. Pasteur	*3. research*	*6. vaccine*	*9. world*
2. doctors	*4. disease*	*7. received*	*10. prevent*
	5. prove	*8. germs*	

WHAT HAPPENED FIRST? — PAGE 23

5, 2, 6
4, 1, 3

SENTENCE LINE-UP — PAGE 24

***(3)** One day a man came to see Louis Pasteur and asked if he would study the epidemic that was killing the silkworms in the south of France. **(1)** Pasteur agreed to look into the problem. **(5)** So he took some of his best students and his family to Alais, his own village in the south of France. **(6)** There the students and the Pasteurs settled down in a cottage to solve the mystery of the silkworms. **(2)** He studied for several months and discovered the disease that was killing the silkworms. **(4)** Pasteur cured the disease and saved the French silk industry!*

TRIANGLE PUZZLERS — PAGE 26

1a. ON	*2a. AS*	*3a. IN*
1b. ONE	*2b. WAS*	*3b. WIN*

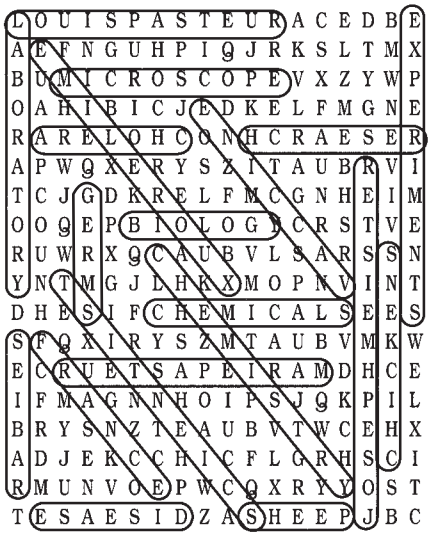
COMPLETE THE SENTENCES — PAGE 28

1. truth	*6. rabid*
2. working	*7. decision*
3. miracles	*8. recovered*
4. himself	*9. one*
5. inoculate	*10. thirty-seven*

PUZZLING POETRY — PAGE 30

Answers: Laboratory, disease, germs, rabid or mad dog, science

WORD SEARCH — PAGE 31



DOT TO DOT — PAGE 32

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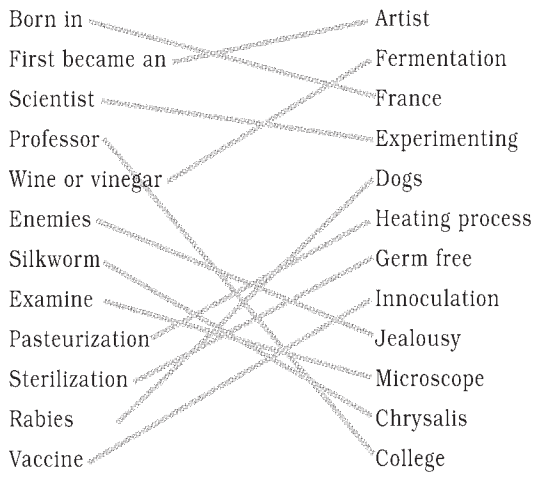
MIX 'N' MATCH CODE — PAGE 34

1. *Spontaneous generation*
2. *That disease is caused by an invasion of the body by germs*
3. *It led to the prevention of disease.*

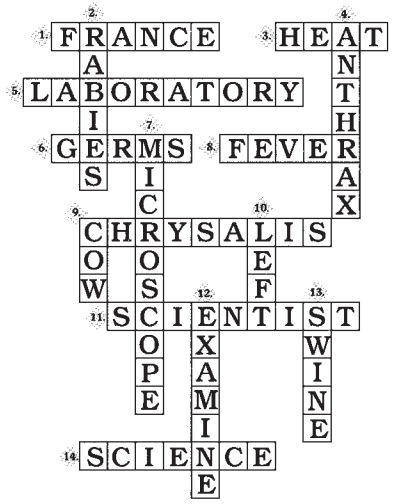
MATCHING GAME — PAGE 35



PASTEUR'S SCRAMBLERS — PAGE 36

1. *Joseph Meister*
2. *Emile Roux*
3. *anthrax*
4. *silkworm*
5. *rabies*
6. *germs*
7. *laboratory*
8. *typhoid fever*
9. *vaccine*
10. *microscope*

CROSSWORD PUZZLE — PAGE 38



GET A CLUE! — PAGE 40

1. *Joseph*
2. *Emile*
3. *air*
4. *rabies*
5. *Marie*
6. *vaccine*
7. *germs*
8. *Paris*
9. *anthrax*
10. *chickens*
11. *cholera*
12. *chemist*

perseverance

TRUE OR FALSE — PAGE 41

1. *True*
2. *True*
3. *False*
4. *True*
5. *True*
6. *True*
7. *True*
8. *False*
9. *False*
10. *True*
11. *False*
12. *False*

QUESTIONS — PAGE 42

1. *Louis Pasteur was born in France.*
2. *Louis Pasteur was a chemistry teacher and a chemist.*
3. *Pasteur's lifelong assistant was Emile Roux.*
4. *They were collecting air into bottles filled with water.*
5. *The water in the bottles containing air from the mountain and meadow stayed clear. The water containing air from the city turned brown.*
6. *Pasteur's theory was that germs are carried in dust by the air and that disease comes from these germs.*
7. *The medical doctors did not believe his theory, but continued to believe that a person is born with a disease waiting to happen.*
8. *Cholera was killing all of the chickens.*
9. *He first called on the medical doctors to find a cure.*
10. *Then he called on Louis Pasteur.*
11. *Pasteur had a stroke.*
12. *Typhoid fever killed three of Pasteur's daughters.*
13. *He injected a weak form of cholera.*
14. *Anthrax attacks sheep and cattle.*
15. *Pasteur injected vaccine into 25 sheep and then gave them deadly doses of anthrax. They lived, which proved his theory.*
16. *The person will get rabies.*
17. *Pasteur had never used his rabies vaccine on a human before.*
18. *Joseph lived after being badly bitten by a rabid animal.*
19. *Louis Pasteur had cured his first human, which led to the saving of thousands of lives.*
20. *Yes, the Academy of Medicine accepted Pasteur's theories and presented him with many honors.*

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